***Real Life Connections Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_***

***Electrolyte Imbalance Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Pd #\_\_\_\_***

*Today in class we discussed the importance of inorganic compounds like salts, acids, and bases. The proper balance of these inorganic compounds is essential for survival. Common electrolytes that are measured by doctors with blood testing include sodium, potassium, chloride, and bicarbonate. Please use your notes and the internet to research more information about these electrolytes and how their normal and abnormal ranges in the body have an effect on health. Please feel free to record these answers on a separate sheet of paper if needed.*

1. What specifically is an electrolyte?
2. Is sodium a positive or negative ion (cation or anion)? Is it more abundant outside or inside the cell?
3. How is excess sodium excreted from our body?
4. What biological role does sodium play in our body?
5. What is hypernatremia and what are its causes?
6. What is hyponatremia and what are its causes?
7. What is the normal blood sodium level supposed to be?
8. Is potassium a positive or negative ion (cation or anion)? Is it more abundant outside or inside the cell?
9. How is potassium excreted from our body?
10. What biological role does potassium play in our body?
11. What is hyperkalemia and what is it caused by?
12. What is the name for decreased levels of potassium and what is it caused by?
13. What is the normal blood potassium level supposed to be?
14. Is the chloride ion a positive or negative ion (cation or anion)? Is it more abundant inside or outside of the cells?
15. What biological role does chloride play in our body?
16. What is hyperchloremia and what is it caused by?
17. What is hypochloremia and what is it caused by?
18. What is the purpose of the bicarbonate ion?
19. What is the chemical notation for bicarbonate?